

Double-coated adhesive tape

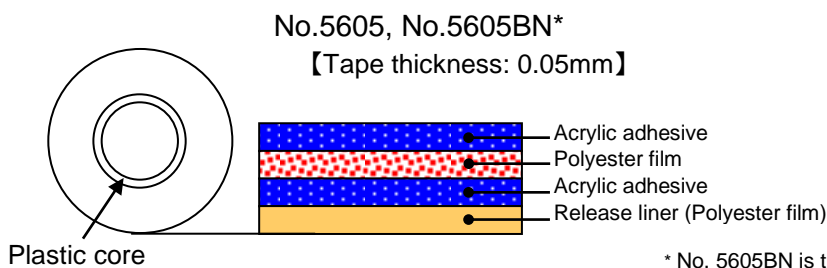
No.5605, No.5605BN

Outline

Nitto Denko No. 5605 and No. 5605BN are 0.05mm-thick polyester film based double-coated adhesive tapes with acrylic adhesive.

Using a polyester film release liner and plastic core, the double-coated adhesive tapes are ideal for bonding applications such as peripheral parts of LCD backlight modules.

Structure



* No. 5605BN is the black version of No. 5605.
Uses black polyester film.

Features

- Offers strong bonding for FPC, reflective sheets and housing used for LCD backlight modules.
- Uses polyester release liner and plastic core. Tape structure minimizes dust emission.
- Adheres well to plastics.
- Halogen-free type. (Chloride compounds are not used for this product.)
- The ten hazardous materials restricted by the RoHS directive are not compounded.

Applications

- Fixing of reflective sheets used for LCD backlight modules of digital cameras and cellular telephones.
- Fixing of parts for compact home appliances

Standards Size

Tape thickness (mm)	Width (mm)	Length (m)
0.05	16~500	100

For more information, please contact us.

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Properties

● Adhesion(180° peel) by substrate

Substrate	No.5605, No.5605BN
ABS plate	10.1
Polystyrene plate	10.3
Acrylic plate	10.9
Polycarbonate plate	11.3
Polyester film	10.9
Stainless steel plate	11.0
Aluminum plate	9.7
Glass plate	10.7
Polyimide	10.6

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

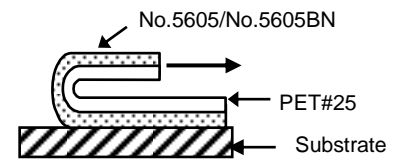
Peeling angle: 180°

Measurement condition: 23°C, 50%RH

Pressure application conditions

* 1 pass back and forth with 2-kg roller

<Test method>



● Adhesion (180° peel) by temperature

Temperature	No.5605, No.5605BN
0°C	12.6
10°C	11.3
23°C	11.0
40°C	9.2
60°C	7.0
80°C	5.9

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement temperature: 0°C, 10°C, 23°C, 40°C,
60°C, 80°C

Application under various temperatures

→ Measurement under various temperatures

Substrate: Stainless steel plate

● 180° peeling strength at low temperatures (applied at 23°C and measured at 0°C and -10°C)

Substrate	Temperature	No.5605, No.5605BN
Stainless steel plate	0°C	12.3
	-10°C	12.7
Polyester film	0°C	9.1
	-10°C	8.6

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement temperature: 0°C, -10°C

*Applied at 23°C, 50% RH

→ measured at 0°C and -10°C

Substrate: Stainless steel plate

Polyester film

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Properties

● Holding power

Temperature	No.5605, No.5605BN
40°C	0.3

(Unit: mm/hr)

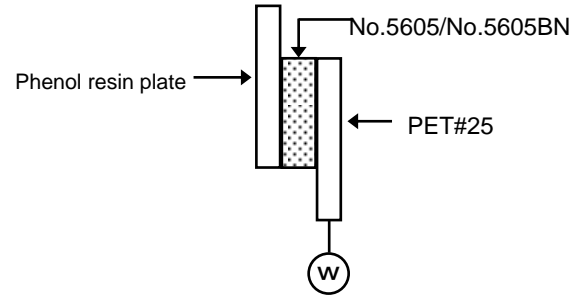
Measurement temperature: 40°C

Application area: 10mm x 20mm

Load: 4.9N (500g)

Substrate: Phenol resin plate

<Test method>



● Shear strength

Temperature	No.5605, No.5605BN
23°C	610

(Unit: N/20mmx20mm)

Substrate: Acrylic plate/acrylic plate

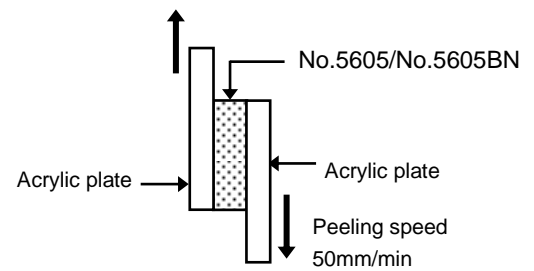
Tape area: 20mm x 20mm

Peeling speed: 50mm/min

Measurement temperature: 23°C, 50%RH

Measurement method: A specimen is prepared and shear strength is measured after allowing it to set 30 minutes.

<Test method>



● 180° peeling strength by pressure

Pressure	No.5605, No.5605BN
0.1 kg	10.3
0.5 kg	10.4
2 kg	11.0
5 kg	11.3

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement condition: 23°C, 50%RH

Pressure application conditions

* 0.1kg, 0.5kg, 2kg, 5kg

1 pass back and forth with 2-kg roller

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Properties

● Adhesion(180° peel) after application (increase)

Temperature	Time	No.5605, No.5605BN
23°C	0.5 hrs	11.0
	4 hrs	11.0
	12 hrs	11.2
	24 hrs	11.2
	48 hrs	11.2
	72 hrs	11.3

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement condition: 23°C, 50%RH

Substrate: Stainless steel plate

● Adhesion(180° peel) (change after application)

Temperature	Time	No.5605, No.5605BN
23°C	1 day	11.2
	14 days	12.2
	30 days	12.4
40°C, 92%RH	1 day	12.6
	14 days	13.1
	30 days	13.1
50°C	1 day	12.4
	14 days	13.4
	30 days	14.3
70°C	1 day	12.8
	14 days	15.5
	30 days	16.2

(Unit: N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement condition: 23°C, 50%RH

Substrate: Stainless steel plate

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Precautions when using

- Remove all oil, moisture and dirt from the surface of the substrate before applying.
- The tape employs pressure-sensitive adhesive. Be sure to apply pressure with a roller or press when applying. Failure to do so could affect properties or appearance.
- The tape may not adhere well to significantly uneven or distorted surfaces. Level off the surface as much as possible before applying.
- Because it is very thin, you should avoid applying large loads for at least several hours following application.

Precautions when storing

- Be sure to keep the tape in its box when not using.
- Keep in a cool dark place not exposed to direct sunlight.

Safety precautions

 WARNING
<ul style="list-style-type: none">● Make sure the product is suitable for the application (objective and conditions) before attempting to use. The tape may come off depending on the substrate to which it is applied or conditions under which it is applied.● Use in combination with another method of joining if there is possibility of an accident.

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